



Volume I – Proposal

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Enterprise Applications PPEA Detailed Proposal

Commonwealth of Virginia PPEA – Detailed Phase

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Section 1.0 - As-Is Cost of Doing Business

1.1 Introduction

What does it take to support the administrative processes of a \$29 billion enterprise? As documented in this section – it takes thousands of people and in excess of a half-billion dollars. The Commonwealth of Virginia’s budget is the size of a Fortune 100 company with the administrative infrastructure of a sizable conglomerate.

Administrative processes represented by the four Enterprise Applications Functional Areas of Administrative Management, Financial Management, Human Resources Management, and Supply Chain Management represent a significant cost to the Commonwealth. The 26 processes that fall within these Functional Areas (or towers, as they are also called) range from accounting to equipment management and from position classification to inventory control. Although largely invisible to citizens, businesses, and visitors, these processes are vital to the operations of Virginia’s government. In this section, the Commonwealth Partners (IBM and BearingPoint) discuss the cost of the Commonwealth’s current administrative processes. Measuring these costs establishes a benchmark for the re-engineering and re-solutioning proposals to reduce costs and deliver better services.

The Commonwealth’s leadership has consistently viewed administrative processes as an area in which significant savings can be found. Governor Warner recognized this fact and upon his election appointed a commission of former government officials and state business leaders to study the opportunities for savings. In 2002, the Governor’s Commission on Efficiency and Effectiveness (The Wilder Commission) identified several hundreds of millions of dollars in “real and substantial savings” annually to be achieved through streamlining and consolidating agencies, better use of technology to improve service delivery, and the employment of widely-used management tools, such as continuous process improvement.

Under the Public-Private Education Act (PPEA), the Commonwealth Partners submitted a conceptual proposal to the Commonwealth of Virginia for an overall information technology (IT) solution that included Enterprise Application processes and systems. Because the proposal had such a wide ranging scope, the Commonwealth asked our team and CGI-AMS to participate in a due diligence process to define the scope of the efforts to be undertaken in an Enterprise Applications project, and eventually to submit separate proposals for improving administrative processes and systems.

Working closely with the Commonwealth project team, the Commonwealth Partners, and CGI-AMS designed a process to gather the information necessary for the submission of proposals. The due diligence process included face to face interviews, a survey instrument sent to selected agencies, and follow up interviews to clarify information received from the surveys. Surveys were sent to 40 agencies throughout the Commonwealth representing all of the major process owners and users in the Administrative, Finance, Human Resources, and Supply Chain management processes. The information gathered during due diligence included process flows,

cost drivers, feedback on the effectiveness of the processes and systems, and recommendations for improving the processes.

1.2 Surveyed Agencies' Costs

The starting point for our estimation of the As-Is cost of doing business is the survey of agencies conducted during due diligence. The survey of agencies included questions designed to quantify the cost drivers for administrative processes, such as staffing levels, workload measures, and the costs of acquiring and maintaining the systems that support the processes. For the Finance, Administration, and Supply Chain towers, all of the 40 agencies selected for the due diligence process were surveyed. (For Human Resources, the Commonwealth selected 36 of the 40 agencies for inclusion in the survey). These agencies employ 50,000 of the 56,000 persons in the Executive Branch, non-Higher Education agencies and account for over 90 percent of the HR transactions reported by the Department of Human Resource Management (DHRM). Each agency included in the due diligence process was also sent an Information Technology survey, which included questions on the costs of supporting the IT requirements of the surveyed processes.

1.2.1 Costs for Surveyed Agencies

Table 1-1 displays the estimated costs for administrative processes among surveyed agencies. To effect a consistent extrapolation across all Functional Areas, this table includes only the 36 agencies that were surveyed in all four towers.

Table 1-1: Estimated Costs for Administrative Processes

Surveyed Agencies	State Staff	Contractors	Facilities	IT	Total Cost
Human Resources Tower					
Time & Labor	\$15,702,603	\$239,200	\$619,500		\$16,561,303
Position Classification	7,012,810	312,000	251,750		7,576,560
Personnel Action Processing	2,989,336	20,800	138,750		159,550
Payroll Management	6,735,245	291,200	345,750		636,950
Evaluation	3,265,028	20,800	140,000		3,425,828
Applicant Intake	5,521,955	364,000	232,500		6,118,455
Tower Totals	\$41,226,977	\$1,248,000	\$1,728,250	\$2,429,477	\$46,632,703
Administration Tower					
Equipment Management	\$ 6,845,926	\$ 468,000	\$ 316,750		\$ 7,630,676
Facilities Management	38,131,508	7,404,800	1,922,500		47,458,808
Fleet Management	22,204,987	312,000	1,150,875		23,667,862
Travel	6,400,349	150,800	265,000		6,816,149
Tower Totals	\$ 73,582,769	\$ 8,335,600	\$ 3,655,125	\$ 3,481,572	\$ 89,055,066
Financial Tower					
Accounting	\$ 9,573,325	\$ 104,000	\$ 391,250		\$ 10,068,575
Asset & Liability Management	10,509,308	18,564,000	472,998		29,546,306
Budget & Finance	33,383,238	312,000	1,261,500		34,956,738
Collections and Receivables	16,022,135	135,200	810,250		16,967,585
Payments	16,982,013	447,200	835,000		18,264,213
Reporting & Information	6,875,249	166,400	243,875		7,285,524
Tower Totals	\$ 93,345,268	\$ 19,728,800	\$ 4,014,873	\$ 9,125,601	\$ 126,214,542
Supply Chain Tower					
Goods & Services Acquisition	\$ 12,580,452	\$ 18,928,000	\$ 619,750		\$ 32,128,202
Inventory Control	22,503,338	624,000	931,000		24,058,338
Tower Totals	\$ 35,083,790	\$ 19,552,000	\$ 1,550,750	\$ 2,479,483	\$ 58,666,023
Surveyed Agencies Totals	\$ 243,238,804	\$ 48,864,400	\$ 10,948,998	\$17,516,132	\$ 320,568,333

As indicated in the table, the cost for supporting administrative functions in the 36 surveyed agencies is \$320.6 million. This cost estimation includes state staff, contractors, IT support, and a factor for facilities costs. Assumptions associated with these estimates are discussed in the following section.

1.2.2 Basis for Surveyed Agencies' Costs

Estimating the cost of the administrative processes in the 36 surveyed agencies required a number of assumptions and calculations. The column headed "State Staff" displays the estimated cost of the Full Time Equivalent (FTE) staff that work on the process as reported by the surveyed agencies. The agencies reported staff by pay band level for each of the processes surveyed. We used the following assumptions, derived in consultation with the Commonwealth during due diligence for calculating the state staff costs:

- The midpoint of the salary range for each pay band is assumed to be the average salary for all employees in the band
- The cost for benefits is estimated at 30 percent of salary

The column headed “Contractors” represents the cost of the non-state employees as reported by the agencies. The average cost for a Contractor is assumed to be \$104,000 per FTE.

The column headed “Facilities” represents the cost of the office space occupied by the State Staff that work on the processes. The following assumptions were used during the due diligence phase for calculating the costs of Facilities:

- The average floor space allocated to each employee is 125 square feet
- The average cost per square foot is \$20.00

The column headed “IT” represents the reported costs of acquiring and maintaining the computer systems that support the processes. The costs included in the IT column are:

- Reported costs of acquiring new applications
- Reported costs for software maintenance fees charged to the agencies by the software providers
- The costs for the Commonwealth staff that support and maintain the software applications. The same assumptions were followed for the calculation of cost of staff, consultants, and facilities as for the “State Staff” column described above.

It should be noted that all of the cost information was self-reported by the agencies and in some cases, validated through the face-to-face interview process. During the due diligence phase, the Commonwealth Partners and CGI-AMS did conduct follow-up interviews with selected agencies to verify some of the reported information, but there is still a margin for error that must be expected in the costs identified.

1.3 Extrapolated Costs for the Commonwealth

To capture the total cost of the processes across the entire Commonwealth of Virginia, we have used the surveyed agencies’ costs to extrapolate to agencies that were not included in the surveys. This includes the Higher Education facilities and agencies, as well as the Judicial and Legislative Branches of Government.

We followed a conservative methodology in extrapolating the costs. The most readily available measures of the relative size of the agencies in the Commonwealth are number of employees and size of budget. To maintain a consistent extrapolation for estimating As-Is costs, we decided to use a single extrapolation factor to apply to the four towers. We assessed each of these measures as a factor in the extrapolation of costs and selected the number of employees for the following reasons:

- Administrative processes have a significant human resource component
- The number of employee is readily available through DHRM
- The Commonwealth Partners’ experience shows that the employee population is a reliable indicator of the relative cost of enterprise applications costs in other states and large public agencies

Please note that for the purpose of the business case in section 5, extrapolation methods vary by tower based on the characteristics of the solution and the nature of the business process being reengineered.

1.3.1 Extrapolated costs by process

Table 1-2 depicts the extrapolated cost of administrative processes for all of the following:

- The Executive Branch
- Independent agencies
- The Judiciary Branch
- The Legislative Branch

Table 1-2: Extrapolated Cost of Administrative Processes

All Agencies (Extrapolated)	State Staff	Contractors	Facilities	IT	Total
Human Resources Tower					
Time & Labor	\$24,044,911	\$476,163	\$1,233,208		\$25,754,282
Position Classification	13,960,049	621,083	501,146		15,082,278
Personnel Action Processing	5,950,721	41,406	276,203		6,268,329
Payroll Management	13,407,516	579,677	688,267		14,675,460
Evaluation	6,499,528	41,406	278,691		6,819,624
Applicant Intake	10,992,280	724,597	462,826		12,179,703
Tower Totals	\$74,855,005	\$2,484,331	\$3,440,341	\$4,836,237	\$85,615,915
Administration Tower					
Equipment Management	\$13,627,842	\$931,624	\$630,538		\$15,190,005
Facilities Management	75,906,483	14,740,365	3,827,025		94,473,873
Fleet Management	44,202,355	621,083	2,290,989		47,114,427
Travel	12,740,853	300,190	527,522		13,568,566
Tower Totals	\$ 146,477,535	\$ 16,593,262	\$ 7,276,074	\$ 6,930,590	\$ 177,277,461
Financial Tower					
Accounting	\$19,057,138	\$207,028	\$778,842		\$20,043,008
Asset & Liability Management	20,920,353	36,954,425	941,573		58,816,352
Budget & Finance	66,454,341	621,083	2,511,205		69,586,629
Collections and Receivables	31,894,461	269,136	1,612,924		33,776,521
Payments	33,805,243	890,219	1,662,193		36,357,655
Reporting & Information	13,686,214	331,244	485,470		14,502,928
Tower Totals	\$ 185,817,751	\$ 39,273,135	\$ 7,992,207	\$18,165,877	\$ 251,248,969
Supply Chain Tower					
Goods & Services Acquisition	\$25,043,277	\$37,679,022	\$1,233,705		\$63,956,004
Inventory Control	44,796,268	1,242,166	1,853,295		47,891,729
Tower Totals	\$ 69,839,545	\$ 38,921,188	\$ 3,087,000	\$ 4,935,782	\$ 116,783,515
All Agencies					
	\$ 476,989,836	\$ 97,271,915	\$ 21,795,622	\$34,868,487	\$ 630,925,860

As shown in the table, the total estimated cost for supporting Administration, Finance, Human Resources, and Supply Chain processes is \$630.9 million.

1.3.2 Cost Analysis Techniques and Assumptions

The primary costs of enterprise applications' processes are those directly related to the support of the human resources that participate in the processes, outside services (contractors) procured to provide the services, and the cost to acquire and maintain the IT infrastructure to support the processes. The costs to support the human resources include salary, employee benefits, office space, and training. The costs of the outside services are the direct costs billed to the Commonwealth. The costs of the IT infrastructure are the hardware, software acquisition and maintenance fees, and the cost of the human resources to support the systems. Any other costs, for example, printing, postage, or office supplies are minimal and for the purpose of our analysis, they have been ignored.

As stated above, we have used the number of employees as our factor for extrapolating costs for the enterprise applications' processes. We based our extrapolation on the following statistics that were provided by the DHRM:

- Classified Staff in the surveyed agencies = 50,374
- Classified Staff in remaining Executive Branch, non-Higher Ed Agencies = 6,642
- Classified Staff in Higher Ed Agencies = 40,075
- Classified Staff in Judiciary Branch = 2,898
- Classified Staff in Legislative Branch = 288
- Total Classified Employees in the Commonwealth of Virginia = 100,277

Based on these statistics, the ratio of Total Classified Employees in the Commonwealth (100,277) to the Classified employees in the surveyed agencies (50,734) yields the extrapolation factor of 1.99 used to calculate the costs of the processes for the Commonwealth as a whole.

1.4 Summary

The cost to support the four Enterprise Applications Functional Areas – Administration, Finance, Human Resources, and Supply Chain is estimated at \$630.9 million a year. This estimate is based on an extrapolation from the costs identified for 36 agencies surveyed during due diligence. The cost for the 36 agencies is based on agency-reported data, assumptions, and estimates developed in consultation with the Commonwealth project team and CGI-AMS. The extrapolation methodology is consistent across all towers and employs the relatively conservative approach of using FTEs to extrapolate, rather than agency budgets. The estimate established a benchmark for the re-engineering and re-solutioning proposals being offered to the Commonwealth.

Although the \$630.9 million in costs to support the administrative process of the Commonwealth pales in comparison to the billions of dollars in program costs for VDOT, DHS, DOC, and DSS, these administrative costs are nonetheless a fertile field for real savings. The Wilder Commission identified more than \$160 million of the potential savings in Real Estate Operations, Inventory Management, Receivables, and Human Resources - the areas that are the subject of our proposal. With the re-engineering and re-solutioning we are proposing, our team has developed from

specific and quantifiable data in excess of \$250 million in savings over the seven year agreement. The experiences of the Commonwealth Partners in the implementation of enterprise application systems and process re-engineering in states such as South Carolina, Michigan, Pennsylvania, and Arizona have resulted in similar savings.

The remainder of this proposal outlines our strategy for joining with the Commonwealth in a public-private partnership to deliver Enterprise Applications efficiently and effectively:

- Section 2 discusses the current COVA Process Environment and Architecture that provides more detailed information from due diligence
- Section 3 describes our proposed solutions for Enterprise Applications in each of the towers
- Section 4 outlines our methodology for carrying out the Commonwealth's vision for efficient Enterprise Applications
- Section 5 presents the business case for our solutions
- Section 6 includes documentation to demonstrate compliance with legislative requirements for the PPEA process
- Volume II contains the Comprehensive Master Services Agreement and schedules

These sections address the requirements outlined in the Proposal Preparation Statement of Work.